

Amendments to the claims:

Claims 1-19 canceled

20. (new) A diesel engine operable by the injection of fuel into air and combustion thereof in the engine to generate power, said diesel engine having an exhaust gas cleaning system and a control unit for controlling the diesel engine and the operation of the exhaust gas cleaning system, said exhaust gas purification system including

a particle filter,

a nitrogen oxide store arranged upstream of said particle filter,

an oxidation catalytic converter arranged upstream of at least one of the nitrogen oxide store and the particle filter, and

a sensor arrangement connected to the control unit for supplying thereto information concerning the operating state of the exhaust gas cleaning system, said control unit being designed to control, on the basis of values provided by the sensor arrangement, a regeneration of the nitrogen oxide store and of the particle filter at exhaust gas temperatures of 400°C to 700°C in such a way that, in a combination of a sulfur regeneration of the nitrogen oxide store, wherein sulfur deposited in the nitrogen oxide store is released, with a soot regeneration of the particle filter, wherein soot collected in the particle filter is burned off, is provided for by one of:

a) the sulfur regeneration of the nitrogen oxide store being followed immediately by the soot regeneration of the particle filter,

b) the switching of process parameters, such that the sulfur regeneration of the nitrogen oxide store is initiated intermittently in intervals during the soot regeneration of the particle filter, and

c) the soot regeneration of the particle filter being initiated intermittently in intervals during the sulfur regeneration of the nitrogen oxide store.

21. (new) A diesel engine according to claim 20, wherein the increase of the exhaust gas temperature for the regeneration procedure is enhanced by the exothermic oxidation of fuel introduced into the exhaust gas via one of the oxidation catalytic converters and the nitrogen oxide store and the engine.

22. (new) A diesel engine according to claim 20, wherein the increase of the exhaust gas temperature for achieving the regeneration procedures is obtained by engine control means including a post-injection of fuel into the diesel engine.

23. (new) A diesel engine according to claim 20, wherein the diesel engine includes exhaust gas recirculation which is deactivated during the soot regeneration of the particle filter.

24. (new) A diesel engine according to claim 20, wherein the sensor arrangement includes a lambda sensor arranged downstream of the particle filter.

25. (new) A diesel engine according to claim 20, wherein the sensor arrangement includes a temperature sensor arranged at one of the locations ahead of, and downstream of, the particle filter for determining the exhaust gas temperature at the particular locations.

26. (new) A diesel engine according to claim 20, wherein the sensor arrangement includes a pressure sensor arranged at one of the locations upstream and downstream of the particle filter.

27. (new) A diesel engine according to claim 20, wherein the particle filter is provided with a coating having at least one of an oxidation catalytic converter function enhancing and a soot oxidation function enhancing property.